

paper. Rs tried to answer many questions. Recommendations were made in most Rs, though none were substantiated.

Conclusions: Systematic Rs are needed to reduce potential bias.

576

ORAL

Determination of DNA damage in uranium miners

U. Plappert, G. Enderle, T.M. Fliedner. *Department of Occupational and Social Medicine, University of Ulm, Germany*

Purpose: In this presentation we present the data obtained in former German uranium miners (Wismut AG) who were exposed during the years 1945 to 1955 to excessive doses of radon decay products. Furthermore they had an elevated continuous radiation exposure between these wild years and today due to the fact that radioactive lead was deposited in the skeletal bones. We analysed whether it is possible to demonstrate today's evidence of this chronic low level radiation exposure in leukocytes seen as effects on the DNA level.

Methods: The alkaline comet assay was used to determine the initial DNA damage as well as the DNA repair capacity of the cells as a parameter of the functional status. For this purpose blood cells were subjected to an *in vitro* irradiation of 100 cGy and DNA damage was determined directly and at different time intervals after *in vitro* irradiation. Patients: 106 former uranium miners were compared to an appropriate control group.

Results: There was no statistically significant difference of DNA damage and DNA repair capacity between the radiation exposed uranium miners and the non-exposed control population.

Conclusions: Our results indicate that the level of chronic radiation exposure during the past 50 years did not result in a significant DNA damage or in an impaired DNA repair capacity of the leukocytes and their progenitors.

577

POSTER

Cancer publication trends, 1966–1995

Lukas J.A. Stalpers. *Department of Radiotherapy, Academic Medical Centre, University of Amsterdam, The Netherlands*

Purpose: Description of publication trends on cancer in the medical literature.

Methods: A Medline™ subject-heading and keyword search was used to count articles on cancer and related topics from 1966 through 1995. USA Cancer Statistics were used to correlate publication numbers to cancer incidences.

Results: (1) Between 1966 and 1995, the number of publications on cancer per year tripled from 16,398 to 47,572. (2) The contribution of publications per cancer site showed little changes in 30 years, e.g. on childhood cancer from 18% to 15%, on leukaemia from 8% to 9%, on breast cancer from 5% to 9%, and on prostate cancer from 1% to 3%. (3) In 1995, the number of cancer articles per new USA cancer case was 28.6 for all neoplasms, ranging between 193.0 for prostate and 0.9 for childhood cancer. (4) The contribution of publications by treatment modality remained stable for radiotherapy and surgical oncology papers at 5% and 11%, and showed an increase for chemotherapy papers from 26% in 1966 to 37% in 1974, remaining stable thereafter. (5) For 1992–1995, most radiotherapy papers originated from the USA; Sweden, The Netherlands and Canada had most publications per number of citizens.

Conclusion: Despite a tripled cancer research output since 1966, there is a major and consistent misbalance in research topics, both with regards to tumour site and treatment modality. Therefore, research objectives have to be redefined.

578

POSTER

Factors encouraging or discouraging women undergo clinical breast examination

F. Barak¹, V. Suskolev², R. Chen, S. Scharf, R. Peled³. ¹*Oncology Unit; ²Epidemiology unit; ³Social Medicine Dept. Hadassah Medical Center, Jerusalem, Israel*

Purpose: To evaluate the factors influencing female immigrants from the former USSR & veteran Israeli women to undergo breast clinical examination (CBE) in order to develop an efficient intervention program.

Study Population: Immigrants from the former USSR living in Israel 5 years or less & Israeli women born in Israel or living there for at least 20 years. A total of 196 women were sampled. Excluded: 4 due to breast

cancer & 10 who could not be traced. Refusal to participate was 19%, mainly for fear and reluctance to discuss cancer. The final samples were 97 immigrants & 89 veteran Israelis.

Methods: Cross sectional study using a self report questionnaire based on the Health Belief Model (HBM). Data were processed in three stages. 1st: the differences between the two groups were described using *t* test or χ^2 . 2nd: the HBM factors were examined by Principal Component Analysis. 3rd: logistic regression on CBE with demographic variables, HBM components & group assignment in the model.

Results: Greater use of CBE was associated with older age and higher education level and less barriers involving timing and attending the service. No difference between immigrants & veteran women was found.

Conclusions: Intervention should take into consideration fears & suspicious related to cancer, barriers of the service, age and education level of women.

579

POSTER

Knowledge and beliefs about cancer prevention in a Northeast Italian population

S.F. Robbiati¹, O. Caffo², F. Tata³, I. Sequi⁴, M. Sannicolò¹. ¹*Hospital of Rovereto; ²Hospital of Trento; ³Hospital of Sarnonada; ⁴Hospital of Nuoro, Italy*

Purpose: We made an self administered questionnaire to explore the people knowledge and beliefs about cancer prevention modalities.

Methods: We distributed this questionnaire to people coming in several units of hospitals in Italy

Results: Until now we collected 2480 questionnaires assessing 73% females and 27% males. In the sample 76% of people aged from 20 to 59 ys, up 70% had a medium-high educational level, 35% were house-working, 21% were smokers, 45% drank wine and 51% had almost one relative affected by a neoplastic disease. The information about prevention modalities was assessed as good in 40% questionnaires but the prevention was really performed in low percentage: in the last five years 81% never performed occult blood test, 87% rectoscopy, 65% oral cavity exploration; among the 49% of the women performing breast self-examination, only 24% do it monthly. In the last five years 46% of the women never underwent mammography and 26% PAP-test. The main obstacle in performing cancer prevention examinations was showed in the indolence by 28%, in the fear by 21%, in the economic charges by 8% and in the lack of quick benefit by 5%. About 47% of the people think that the health authorities advertise the prevention little and 81% that the main part in the education for preventing cancer would be represented by health authorities (39% by school).

Conclusions: More enterprise is need by health authorities for increasing the cancer prevention.

580

POSTER

Physicians' attitudes toward rectal cancer: Results of a French survey

S. Amaud^{1,2}, G. Houvenaeghel¹, B. Lelong¹, K. Antoine¹, J.F. Seitz¹, J.R. Delperio¹, J.P. Moatti². ¹*Institut Paoli-Calmettes, Département de Chirurgie Oncologique 1; ²INSERM U 379, 232 Bd Sainte Marguerite, 13273 Marseille, France*

Purpose: Our survey is focused on therapeutic attitudes face to rectal cancer, related to specialities and physicians' very factors influencing therapeutic decision.

Methods: In spring 1996, a questionnaire was sent to a sample of 720 french physicians, stratified in 4 specialities: gastroenterology, digestive surgery, radiotherapy, medical oncology. This questionnaire included 3 clinical cases of rectal cancer at different stage, a T3N0 tumor, an advanced cancer with recto-vaginal fistula and a relapsed rectal cancer.

Results: 352/622 exploitable answers were returned (57%). The decision modality was pluridisciplinary (versus not) for 52% of physicians for the 1st case, 64% for the 2nd case and 61% for the 3rd case. This decision modality was significantly different according to speciality, type of practice, public or private practice, and proximity of radiotherapy department. Two main attitudes emerged for the 1st clinical case: an exclusive radiotherapy-surgery (RT-SU) (44%) (consensual choice) and a RT-SU with optional or systematic chemotherapy (CT) (51%). This latter choice appeared to be closely dependent on medical speciality and background. For the second clinical case, 70% of physicians have chosen an association RT-SU-CT while 18% have chosen a RT-SU and 4% an exclusive medical treatment. For the 3rd one, 63% have recommended a RT-SU-CT, 18% a RT-SU and 13% an exclusive RT-CT.